

N-((5S)-3-[3-fluoro-4-[1-(methylimino)-1-oxidohexahydro-1 $\lambda^4$ -thiopyran-4-yl]phenyl]-2-oxo-1,3-oxazolidin-5-yl)methyl)cyclopropanecarbothioamide, Z-isomer;  
 N-(((5S)-3-[3-fluoro-4-[1-[(methoxycarbonyl)imino]-1-oxidohexahydro-1 $\lambda^4$ -thiopyran-4-yl]phenyl]-2-oxo-1,3-oxazolidin-5-yl)methyl)cyclopropanecarbothioamide, Z-isomer;  
 N-(((5S)-3-[3-fluoro-4-[1-[(phenylmethoxy)carbonyl]imino]-1-oxidohexahydro-1 $\lambda^4$ -thiopyran-4-yl]phenyl]-2-oxo-1,3-oxazolidin-5-yl)methyl)acetamide, Z-isomer; or  
 N-((5S)-3-[3-Fluoro-4-(1-[(benzylamino)carbonyl]imino)-1-oxidohexahydro-1 $\lambda^4$ -thiopyran-4-yl]phenyl]-2-oxo-1,3-oxazolidin-5-yl)methyl)acetamide, Z-isomer.

66. A method for treating microbial infections comprising: administering to a mammal in need thereof an effective amount of a compound of formula I as shown in claim 47.

#### REMARKS

Applicants have amended claims 1, 8, 9, 17, 22, 24, and 25; canceled claims 15, 18-21, 26-29, and 37; and added new claims 38-66. Support for these amendments can be found in the original claims; in the Specification at pages 5-9 and 16-35; and in the restriction requirement at page 2 of the Office Action. Applicants reaffirm their election of Group I, with traverse, and note that the amended A substituent in formulae I and II now covers species of elected group I. Claims 1-14, 16, 17, 22-25, 30-36, and 38-66 are currently pending. Reconsideration of the pending application is respectfully requested in view of the following remarks.

#### Rejections Under 35 U.S.C. § 112

Claims 10-19 and 22-25 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. With respect to the improper multiple dependent claims, Applicants have corrected the dependency by amending claims 8, 9, 22, 24, and 25, and adding new dependent claims 38-45. Each of claims 8, 9, 22, 24, 25, and 38-45 depends from a single claim. Regarding the improper dependency of claim 20 and claim scope of claims 21, Applicants have canceled claims 18-21. Accordingly, for at least these reasons, the indefiniteness rejections have been overcome.

Claims 30-35 have been rejected under 35 U.S.C. § 112, first paragraph, as being non-enabling. In particular, the Examiner contends that the Specification does not enable one skilled in the art to use the disclosed compounds in the treatment of microbial infections. See claims 30-35 and the Office Action at pages 8 and 9. Applicants note that the phrase microbial infection refers to bacterial infections. Indeed, the claimed oxazolidinone antibacterial agents are a novel synthetic class of antimicrobials with potent activity against a number of human and veterinary pathogens such as Gram-positive and -negative

bacteria, anaerobic organisms (e.g., bacteroides and clostridia species), and acid-fast organisms. See the Specification at page 1, lines 13-25. Moreover, the Specification contains guidance on treating the bacterial infections with the claimed compounds. See pages 14 and 15 of the Specification. Thus, one skilled in the art, having read the Specification, would be able to utilize the claimed compounds to treat the bacterial infections, i.e., microbial infections. Reconsideration of this rejection is respectfully requested.

Rejection Under 35 U.S.C. § 103

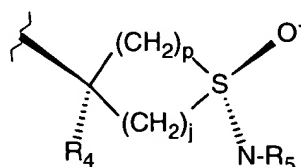
The Examiner rejected claims 1-36 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,688,792 ('792); U.S. Patent No. 5,952,324 ('324) in view of '792; or U.S. Patent No. 5,968,962 ('962) in view of '792. Applicants respectfully disagree.

'792 discloses oxazolidinone derivatives including a S(O)NR<sub>10</sub> substituent in the morpholino-like ring. R<sub>10</sub> can be H, an alkyl, or p-toluenesulfonyl. The alkyl can be optionally substituted with chloro, bromo, hydroxy, alkoxy, amino, and mono- and -dialkylamino. See '792 at column 2, lines 15-18. '324 discloses oxazolidinone derivatives having a bicyclic-ring that includes a S(O)<sub>0-2</sub> group. See '324 at column 1 through column 2. '962 discloses oxazolidinone derivatives having a 4-6 heterocyclic ring that includes a S(O)<sub>0-2</sub> group. See columns 1-2 of '962. In rejecting the claims, the Examiner states that '792 discloses S(O)NR<sub>10</sub> substituents in the morpholino-like ring and therefore teaches the equivalency of S(O)<sub>0-2</sub> groups to S(O)NR<sub>10</sub> groups such that one skilled in the art would be motivated to utilize S(O)NR<sub>10</sub> groups not only in morpholino-like rings of '792 but also in the bicyclic and heterocyclic rings of '324 and '962.

Amended claim 1 requires that the morpholino-like, bicyclic, or heterocyclic ring contain a S(O)NR<sub>5</sub> group in which R<sub>5</sub> is limited to C(=O)C<sub>1-4</sub>alkyl, C(=O)OC<sub>1-4</sub>alkyl, C(=O)NHR<sub>6</sub>, or C(=S)NHR<sub>6</sub>. None of the cited references disclose or suggest utilizing a S(O)NR<sub>5</sub> group, in which R<sub>5</sub> is limited to C(=O)C<sub>1-4</sub>alkyl, C(=O)OC<sub>1-4</sub>alkyl, C(=O)NHR<sub>6</sub>, or C(=S)NHR<sub>6</sub>, as part of the morpholino-like, bicyclic, or heterocyclic ring. Indeed, '792 generally describes S(O)NR<sub>10</sub> groups in which the nitrogen substituent, R<sub>10</sub>, is limited to H, alkyl, or p-toluenesulfonyl. The claimed nitrogen substituents of S(O)NR<sub>5</sub>, e.g., C(=O)C<sub>1-4</sub>alkyl, C(=O)OC<sub>1-4</sub>alkyl, C(=O)NHR<sub>6</sub>, or C(=S)NHR<sub>6</sub> groups, are quite different from those described by '792. '792 also does not disclose any examples of compounds containing a S(O)NR<sub>10</sub> group or their antibacterial activity. Thus, Applicants submit that one skilled in the art would not have been motivated by '792 to produce oxazolidinone derivatives having the specific nitrogen substituents C(=O)C<sub>1-4</sub>alkyl, C(=O)OC<sub>1-4</sub>alkyl, C(=O)NHR<sub>6</sub>, or C(=S)NHR<sub>6</sub> nor expect *appriori* that oxazolidinone derivatives containing the claimed nitrogen substituents of the S(O)NR<sub>5</sub> groups would

exhibit broad antibacterial activity. Accordingly, independent claim 1 and claims dependent therefrom are patentable over `792, `324, `962, whether taken alone or in combination.

New claim 47 specifies that the oxazolidinone derivatives must include a heterocyclic ring containing a S(O)NR<sub>5</sub> group. R<sub>5</sub> can be H, C<sub>1-4</sub>alkyl, C(=O)C<sub>1-4</sub>alkyl, C(=O)OC<sub>1-4</sub>alkyl, C(=O)NHR<sub>6</sub>, or C(=S)NHR<sub>6</sub>, and the B ring must have the following stereochemistry



See claim 47.

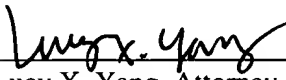
Unexpectedly, compounds having the specified B-ring stereochemistry, i.e., the Z-isomer, exhibit increased antimicrobial activity relative to the E-isomer. For example, the minimum inhibitory concentration (MIC) of Example 13 (the Z-isomer) compared to Example 32 (the E-isomer) is about a factor of 4 less, e.g., about 4 times more effective. In addition, see and compare Example 4 with Example 8. None of the cited references disclose or suggest utilizing a specific stereochemistry on the morpholino-like, bicyclic, or heterocyclic ring to achieve an increased antimicrobial activity. The references also fail to disclose or suggest that a heterocyclic ring including a S(O)NR<sub>5</sub> group having a specific stereochemistry results in increased antimicrobial activity. Rather, as described above, `792 discloses limited ring substituents and `962 is silent regarding any stereochemistry of the 4-6 heterocyclic ring. Thus, one skilled in the art would not have been motivated to produce the oxazolidinone derivatives as recited in claim 47. Accordingly, Applicants submit that independent claim 47 and claims dependent therefrom are patentable over `792, `324, `962, whether taken alone or in combination.

CONCLUSION

Claims 1-14, 16, 17, 22-25, 30-36, and 38-66 are now in condition for allowance, which action is respectfully request. Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned **"Version with markings to show changes made"**.

Please apply any charges or credits to Deposit Account No. 21-0718.

Respectfully submitted,

  
\_\_\_\_\_  
Lucy X. Yang, Attorney  
Registration No. 40,259

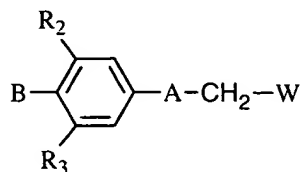
Date: Jan. 3rd, 2002

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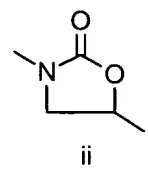
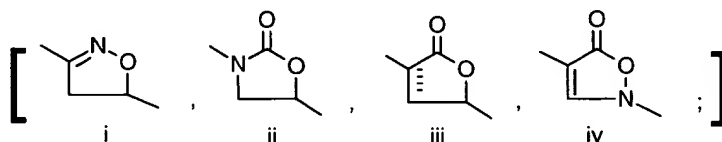
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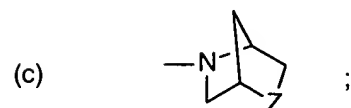
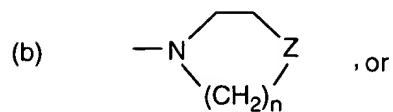
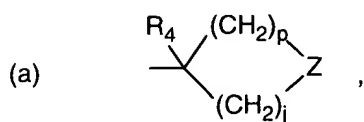
I

or a pharmaceutically acceptable salt thereof wherein:

A is a structure ii [i, ii, iii, or iv]



B is



W is NHC(=X)R<sub>1</sub>, or -Y-het; provided that when A is a structure iv, W is not -Y-het;

X is O, or S; provided that when X is O, B is not the subsection (b).

Y is NH, O, or S;

Z is S(=O)(=N-R<sub>5</sub>);

R<sub>1</sub> is

- (a) H,
- (b) NH<sub>2</sub>,
- (c) NHC<sub>1-4</sub>alkyl,
- (d) C<sub>1-4</sub>alkyl,
- (e) C<sub>2-4</sub>alkenyl,
- (f) OC<sub>1-4</sub>alkyl,
- (g) SC<sub>1-4</sub>alkyl, or
- (h) (CH<sub>2</sub>)<sub>p</sub>C<sub>3-6</sub>cycloalkyl;

at each occurrence, alkyl or cycloalkyl in R<sub>1</sub> is optionally substituted with one or more F, Cl or CN;

R<sub>2</sub> and R<sub>3</sub> are independently H, F, Cl, methyl or ethyl;

R<sub>4</sub> is H, CH<sub>3</sub>, or F;

R<sub>5</sub> is

- [(a) H,
- (b) C<sub>1-4</sub>alkyl,]
- (c) C(=O)C<sub>1-4</sub>alkyl,
- (d) C(=O)OC<sub>1-4</sub>alkyl,
- (e) C(=O)NHR<sub>6</sub>, or
- (f) C(=S)NHR<sub>6</sub>;

R<sub>6</sub> is H, C<sub>1-4</sub>alkyl, or phenyl;

at each occurrence, alkyl in R<sub>5</sub> and R<sub>6</sub> is optionally substituted with one or more halo, CN, NO<sub>2</sub>, phenyl,

C<sub>3-6</sub>cycloalkyl, OR<sub>7</sub>, C(=O)R<sup>7</sup>, OC(=O)R<sub>7</sub>, C(=O)OR<sub>7</sub>, S(=O)<sub>m</sub>R<sub>7</sub>, S(=O)<sub>m</sub>NR<sub>7</sub>R<sub>7</sub>, NR<sub>7</sub>SO<sub>2</sub>R<sub>7</sub>,

NR<sub>7</sub>SO<sub>2</sub>NR<sub>7</sub>R<sub>7</sub>, NR<sub>7</sub>C(=O)R<sub>7</sub>, C(=O)NR<sub>7</sub>R<sub>7</sub>, NR<sub>7</sub>R<sub>7</sub>, oxo, or oxime;

R<sub>7</sub> is H, C<sub>1-4</sub>alkyl, or phenyl;

at each occurrence, phenyl is optionally substituted with one or more halo, CN, NO<sub>2</sub>, phenyl, C<sub>3-6</sub>

cycloalkyl, OR<sub>7</sub>, C(=O)R<sup>7</sup>, OC(=O)R<sub>7</sub>, C(=O)OR<sub>7</sub>, S(=O)<sub>m</sub>R<sub>7</sub>, S(=O)<sub>m</sub>NR<sub>7</sub>R<sub>7</sub>, NR<sub>7</sub>SO<sub>2</sub>R<sub>7</sub>, NR<sub>7</sub>SO<sub>2</sub>NR<sub>7</sub>R<sub>7</sub>,

NR<sub>7</sub>C(=O)R<sub>7</sub>, C(=O)NR<sub>7</sub>R<sub>7</sub>, or NR<sub>7</sub>R<sub>7</sub>;

het is a C-linked five- (5) membered heteroaryl ring having 1-4 heteroatoms selected from the group

consisting of oxygen, sulfur, and nitrogen, or het is a C-linked six (6) membered heteroaryl ring having 1-

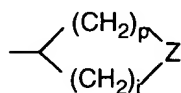
3 nitrogen atoms;

p is 0, 1, or 2;

j is 1, 2, 3, 4, or 5; provided that k and j taken together are 2, 3, 4 or 5;  
 m is 0, 1, or 2; and  
 n is 2 or 3; and ----- in structure iii is either a double bond or a single bond].

Cancel claim 15 without prejudice.

17. A compound of claim 9 [claim 8] wherein structure B is



wherein Z is S(=O)(=NR<sub>5</sub>).

Cancel Claims 18-21.

Please amend claims 22, 24, and 25 as follows.

22. A compound of claim 14 [claim 14-17] wherein R<sub>5</sub> is C(=O)C<sub>1-4</sub>alkyl, C(=O)OC<sub>1-4</sub>alkyl, C(=O)NH<sub>2</sub>, or C(=O)NHC<sub>1-4</sub>alkyl.

24. A compound of claim 14 [claim 14-17] wherein R<sub>5</sub> is C(=O)CH<sub>3</sub>.

25. A compound of claim 14 [claim 14-17] wherein R<sub>5</sub> is C(=O)OCH<sub>3</sub>.

Cancel claims 26-29, and 37 without prejudice.

Please add new claims 38-66.

38. A compound of claim 16 wherein R<sub>5</sub> is C(=O)C<sub>1-4</sub>alkyl, C(=O)OC<sub>1-4</sub>alkyl, C(=O)NH<sub>2</sub>, or C(=O)NHC<sub>1-4</sub>alkyl.

39. A compound of claim 38 wherein R<sub>5</sub> is C(=O)NHCH<sub>3</sub>, or C(=O)NHCH<sub>2</sub>CH<sub>3</sub>.

40. A compound of claim 16 wherein R<sub>5</sub> is C(=O)CH<sub>3</sub>.

41. A compound of claim 16 wherein  $R_5$  is  $C(=O)OCH_3$ .
42. A compound of claim 17 wherein  $R_5$  is  $C(=O)C_{1-4}alkyl$ ,  $C(=O)OC_{1-4}alkyl$ ,  $C(=O)NH_2$ , or  $C(=O)NHC_{1-4}alkyl$ .
43. A compound of claim 42 wherein  $R_5$  is  $C(=O)NHCH_3$ , or  $C(=O)NHCH_2CH_3$ .
44. A compound of claim 17 wherein  $R_5$  is  $C(=O)CH_3$ .
45. A compound of claim 17 wherein  $R_5$  is  $C(=O)OCH_3$ .
46. A compound of claim 2 which is  
  
N-((5S)-3-[3-fluoro-4-[1-(acetylimino)-1-oxido-1,3-oxazolidin-5-yl]phenyl]-2-oxo-1,3-oxazolidin-5-yl)methyl)acetamide, Z-isomer;  
N-((5S)-3-[3-fluoro-4-[1-(acetylimino)-1-oxido-1,3-oxazolidin-5-yl]phenyl]-2-oxo-1,3-oxazolidin-5-yl)methyl)propanethioamide, Z-isomer;  
N-((5S)-3-[3-fluoro-4-(1-[(methylamino)carbonyl]imino)-1-oxido-1,3-oxazolidin-5-yl]phenyl]-2-oxo-1,3-oxazolidin-5-yl)methyl)propanethioamide, Z-isomer;  
N-((5S)-3-[3-fluoro-4-(1-[(methoxycarbonyl)imino]-1-oxido-1,3-oxazolidin-5-yl]phenyl)-2-oxo-1,3-oxazolidin-5-yl)methyl)propanethioamide, Z-isomer;  
N-((5S)-3-[3-fluoro-4-(1-[(ethoxycarbonyl)methyl]imino)-1-oxido-1,3-oxazolidin-5-yl]phenyl)-2-oxo-1,3-oxazolidin-5-yl)methyl)propanethioamide, Z-isomer;  
N-((5S)-3-[3-fluoro-4-(1-[(4-nitrophenyl)amino]carbonyl]imino)-1-oxido-1,3-oxazolidin-5-yl]phenyl)-2-oxo-1,3-oxazolidin-5-yl)methyl)propanethioamide, Z-isomer;  
N-((5S)-3-[3-fluoro-4-(1-[(aminocarbonyl)imino]-1-oxido-1,3-oxazolidin-5-yl]phenyl)-2-oxo-1,3-oxazolidin-5-yl)methyl)propanethioamide, Z-isomer;  
N-((5S)-3-[3-fluoro-4-(1-[(aminocarbonyl)methyl]imino)-1-oxido-1,3-oxazolidin-5-yl]phenyl)-2-oxo-1,3-oxazolidin-5-yl)methyl)propanethioamide, Z-isomer;  
N-(((5S)-3-[3-fluoro-4-(1-[(methoxycarbonyl)imino]-1-oxido-1,3-oxazolidin-5-yl]phenyl)-2-oxo-1,3-oxazolidin-5-yl)methyl)propanethioamide;  
N-(((5S)-3-[3-fluoro-4-(1-[(methoxycarbonyl)imino]-1-oxido-1,3-oxazolidin-5-yl]phenyl)-2-oxo-1,3-oxazolidin-5-yl)methyl)cyclopropanecarbothioamide ;

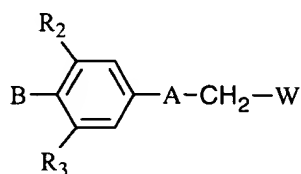


N-(((5*S*)-3-{3-fluoro-4-[1-[(methoxycarbonyl)imino]-1-oxidohexahydro-1 $\lambda^4$ -thiopyran-4-yl]phenyl}-2-oxo-1,3-oxazolidin-5-yl)methyl] cyclopropanecarbothioamide, Z-isomer;

N-(((5*S*)-3-{3-fluoro-4-[1-[[[(phenylmethoxy)carbonyl]imino]-1-oxidohexahydro-1 $\lambda^4$ -thiopyran-4-yl]phenyl]-2-oxo-1,3-oxazolidin-5-yl)methyl]acetamide, Z-isomer; or

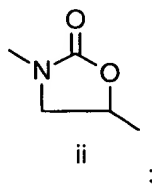
N-(((5*S*)-3-[3-Fluoro-4-(1-[[[(benzylamino)carbonyl]imino]-1-oxidohexahydro-1 $\lambda^4$ -thiopyran-4-yl]phenyl]-2-oxo-1,3-oxazolidin-5-yl)methyl]acetamide, Z-isomer.

47. A compound of formula II

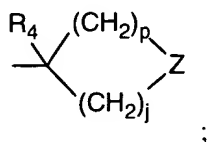


or a pharmaceutically acceptable salt thereof wherein:

A is a structure ii



B is

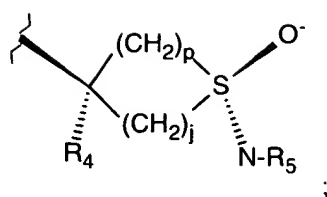


W is NHC(=X)R<sub>1</sub>, or -Y-het; provided that when A is a structure iv, W is not -Y-het;

X is O, or S; provided that when X is O, B is not the subsection (b).

Y is NH, O, or S;

Z is S(=O)(=N-R<sub>5</sub>) and the B ring has the following stereochemistry



R<sub>1</sub> is

- (a) H,
- (b) NH<sub>2</sub>,
- (c) NHC<sub>1-4</sub>alkyl,
- (d) C<sub>1-4</sub>alkyl,
- (e) C<sub>2-4</sub>alkenyl,
- (f) OC<sub>1-4</sub>alkyl,
- (g) SC<sub>1-4</sub>alkyl, or
- (h) (CH<sub>2</sub>)<sub>p</sub> C<sub>3-6</sub>cycloalkyl;

at each occurrence, alkyl or cycloalkyl in R<sub>1</sub> is optionally substituted with one or more F, Cl or CN;

R<sub>2</sub> and R<sub>3</sub> are independently H, F, Cl, methyl or ethyl;

R<sub>4</sub> is H, CH<sub>3</sub>, or F;

R<sub>5</sub> is

- (a) H,
- (b) C<sub>1-4</sub>alkyl,
- (c) C(=O)C<sub>1-4</sub>alkyl,
- (d) C(=O)OC<sub>1-4</sub>alkyl,
- (e) C(=O)NHR<sub>6</sub>, or
- (f) C(=S)NHR<sub>6</sub>;

R<sub>6</sub> is H, C<sub>1-4</sub>alkyl, or phenyl;

at each occurrence, alkyl in R<sub>5</sub> and R<sub>6</sub> is optionally substituted with one or more halo, CN, NO<sub>2</sub>, phenyl,

C<sub>3-6</sub> cycloalkyl, OR<sub>7</sub>, C(=O)R<sup>7</sup>, OC(=O)R<sub>7</sub>, C(=O)OR<sub>7</sub>, S(=O)<sub>m</sub>R<sub>7</sub>, S(=O)<sub>m</sub>NR<sub>7</sub>R<sub>7</sub>, NR<sub>7</sub>SO<sub>2</sub>R<sub>7</sub>,

NR<sub>7</sub>SO<sub>2</sub>NR<sub>7</sub>R<sub>7</sub>, NR<sub>7</sub>C(=O)R<sub>7</sub>, C(=O)NR<sub>7</sub>R<sub>7</sub>, NR<sub>7</sub>R<sub>7</sub>, oxo, or oxime;

R<sub>7</sub> is H, C<sub>1-4</sub>alkyl, or phenyl;

at each occurrence, phenyl is optionally substituted with one or more halo, CN, NO<sub>2</sub>, phenyl, C<sub>3-6</sub>

cycloalkyl, OR<sub>7</sub>, C(=O)R<sup>7</sup>, OC(=O)R<sub>7</sub>, C(=O)OR<sub>7</sub>, S(=O)<sub>m</sub>R<sub>7</sub>, S(=O)<sub>m</sub>NR<sub>7</sub>R<sub>7</sub>, NR<sub>7</sub>SO<sub>2</sub>R<sub>7</sub>, NR<sub>7</sub>SO<sub>2</sub>NR<sub>7</sub>R<sub>7</sub>,

NR<sub>7</sub>C(=O)R<sub>7</sub>, C(=O)NR<sub>7</sub>R<sub>7</sub>, or NR<sub>7</sub>R<sub>7</sub>;

het is a C-linked five- (5) membered heteroaryl ring having 1-4 heteroatoms selected from the group consisting of oxygen, sulfur, and nitrogen, or het is a C-linked six (6) membered heteroaryl ring having 1-3 nitrogen atoms;

p is 0, 1, or 2;

j is 1, 2, 3, 4, or 5; provided that k and j taken together are 2, 3, 4 or 5;

m is 0, 1, or 2;

n is 2 or 3; and ----- in structure iii is either a double bond or a single bond..

48. The compound of claim 47 wherein R<sub>1</sub> is C<sub>1-4</sub>alkyl.

49. The compound of claim 47 wherein R<sub>1</sub> is ethyl.

50. The compound of claim 47 wherein R<sub>1</sub> is methyl.

51. The compound of claim 47 wherein R<sub>1</sub> is C<sub>3-6</sub>cycloalkyl.

52. The compound of claim 47 wherein R<sub>1</sub> is cyclopropyl

53. The compound of claim 47 wherein X is sulfur atom.

54. The compound of claim 47 wherein X oxygen atom.

55. The compound of claim 53 wherein one of R<sub>2</sub> and R<sub>3</sub> is H, the other one is F.

56. The compound of claim 54 wherein one of R<sub>2</sub> and R<sub>3</sub> is H, the other one is F.

57. The compound of claim 47 wherein R<sub>5</sub> is H.

58. The compound of claim 47 wherein R<sub>5</sub> is C<sub>1-4</sub>alkyl, optionally substituted with OH; or C<sub>1-4</sub>alkyl substituted with C(=O)NHC<sub>1-4</sub>alkyl, C(=O)NH<sub>2</sub> or phenyl; wherein the phenyl is optionally substituted with OH, methyl, NO<sub>2</sub>, CF<sub>3</sub>, or CN.

59. The compound of claim 47 wherein R<sub>5</sub> is CH<sub>3</sub>, or ethyl.
60. The compound of claim 47 wherein R<sub>5</sub> is C<sub>1-4</sub>alkyl substituted with phenyl wherein the phenyl is optionally substituted with NO<sub>2</sub>.
61. The compound of claim 47 wherein R<sub>5</sub> is C(=O)C<sub>1-4</sub>alkyl, C(=O)OC<sub>1-4</sub>alkyl, C(=O)NH<sub>2</sub>, or C(=O)NHC<sub>1-4</sub>alkyl.
62. The compound of claim 47 wherein R<sub>5</sub> is C(=O)NHCH<sub>3</sub>, or C(=O)NHCH<sub>2</sub>CH<sub>3</sub>.
63. The compound of claim 47 wherein R<sub>5</sub> is C(=O)CH<sub>3</sub>.
64. The compound of claim 47 wherein R<sub>5</sub> is C(=O)OCH<sub>3</sub>.
65. A compound of claim 47 which is  
N-((5*S*)-3-[3-fluoro-4-(1-imino-1-oxidohexahydro-1λ<sup>4</sup>-thiopyran-4-yl)phenyl]-2-oxo-1,3-oxazolidin-5-yl)methyl)acetamide (Z)-isomer;  
N-((5*S*)-3-[3-fluoro-4-(1-imino-1-oxidohexahydro-1λ<sup>4</sup>-thiopyran-4-yl)phenyl]-2-oxo-1,3-oxazolidin-5-yl)methyl)ethanethioamide (Z)-isomer;  
N-((5*S*)-3-[3-fluoro-4-(1-imino-1-oxidohexahydro-1λ<sup>4</sup>-thiopyran-4-yl)phenyl]-2-oxo-1,3-oxazolidin-5-yl)methyl)propanethioamide (Z)-isomer;  
N-((5*S*)-3-[3-fluoro-4-(1-imino-1-oxidohexahydro-1λ<sup>4</sup>-thiopyran-4-yl)phenyl]-2-oxo-1,3-oxazolidin-5-yl)methyl)cyclopropanethioamide (Z)-isomer;  
N-((5*S*)-3-[3-fluoro-4-[1-(acetylimino)-1-oxidohexahydro-1λ<sup>4</sup>-thiopyran-4-yl]phenyl]-2-oxo-1,3-oxazolidin-5-yl)methyl)acetamide, Z-isomer;  
N-((5*S*)-3-[3-fluoro-4-[1-(methyylimino)-1-oxidohexahydro-1λ<sup>4</sup>-thiopyran-4-yl]phenyl]-2-oxo-1,3-oxazolidin-5-yl)methyl)propanethioamide, Z-isomer;  
N-((5*S*)-3-[3-fluoro-4-[1-(acetylimino)-1-oxidohexahydro-1λ<sup>4</sup>-thiopyran-4-yl]phenyl]-2-oxo-1,3-oxazolidin-5-yl)methyl)propanethioamide, Z-isomer;  
N-((5*S*)-3-[3-fluoro-4-[1-(ethyylimino)-1-oxidohexahydro-1λ<sup>4</sup>-thiopyran-4-yl]phenyl]-2-oxo-1,3-oxazolidin-5-yl)methyl)propanethioamide, Z-isomer;

N-((5*S*)-3-[3-fluoro-4-[1-[(phenylmethyl)imino]-1-oxido-1,3-dihydro-2H-thiopyran-4-yl]phenyl]-2-oxo-1,3-oxazolidin-5-yl)methyl)propanethioamide, *Z*-isomer;

N-((5*S*)-3-[3-fluoro-4-[1-[(3-phenylpropyl)imino]-1-oxido-1,3-dihydro-2H-thiopyran-4-yl]phenyl]-2-oxo-1,3-oxazolidin-5-yl)methyl)propanethioamide, *Z*-isomer;

N-((5*S*)-3-[3-fluoro-4-[1-[(methylamino)carbonyl]imino]-1-oxido-1,3-dihydro-2H-thiopyran-4-yl]phenyl]-2-oxo-1,3-oxazolidin-5-yl)methyl)propanethioamide, *Z*-isomer;

N-((5*S*)-3-[3-fluoro-4-[1-[(methoxycarbonyl)imino]-1-oxido-1,3-dihydro-2H-thiopyran-4-yl]phenyl]-2-oxo-1,3-oxazolidin-5-yl)methyl)propanethioamide, *Z*-isomer;

N-((5*S*)-3-[3-fluoro-4-[1-[(ethoxycarbonyl)methyl]imino]-1-oxido-1,3-dihydro-2H-thiopyran-4-yl]phenyl]-2-oxo-1,3-oxazolidin-5-yl)methyl)propanethioamide, *Z*-isomer;

N-((5*S*)-3-[3-fluoro-4-[1-[[[(4-nitrophenyl)amino]carbonyl]imino]-1-oxido-1,3-dihydro-2H-thiopyran-4-yl]phenyl]-2-oxo-1,3-oxazolidin-5-yl)methyl)propanethioamide, *Z*-isomer ;

N-((5*S*)-3-[3-fluoro-4-[1-[(aminocarbonyl)imino]-1-oxido-1,3-dihydro-2H-thiopyran-4-yl]phenyl]-2-oxo-1,3-oxazolidin-5-yl)methyl)propanethioamide, *Z*-isomer;

N-((5*S*)-3-[3-fluoro-4-[1-[(aminocarbonyl)methyl]imino]-1-oxido-1,3-dihydro-2H-thiopyran-4-yl]phenyl]-2-oxo-1,3-oxazolidin-5-yl)methyl)propanethioamide, *Z*-isomer;

N-((5*S*)-3-[3-fluoro-4-[1-[(2-hydroxyethyl)imino]-1-oxido-1,3-dihydro-2H-thiopyran-4-yl]phenyl]-2-oxo-1,3-oxazolidin-5-yl)methyl)propanethioamide, *Z*-isomer;

N-((5*S*)-3-[3-fluoro-4-[1-(methylimino)-1-oxido-1,3-dihydro-2H-thiopyran-4-yl]phenyl]-2-oxo-1,3-oxazolidin-5-yl)methyl)cyclopropanecarbothioamide, *Z*-isomer;

N-(((5*S*)-3-[3-fluoro-4-[1-[(methoxycarbonyl)imino]-1-oxido-1,3-dihydro-2H-thiopyran-4-yl]phenyl]-2-oxo-1,3-oxazolidin-5-yl)methyl)cyclopropanecarbothioamide, *Z*-isomer;

N-(((5*S*)-3-[3-fluoro-4-[1-[(phenylmethoxy)carbonyl]imino]-1-oxido-1,3-dihydro-2H-thiopyran-4-yl]phenyl]-2-oxo-1,3-oxazolidin-5-yl)methyl)acetamide, *Z*-isomer; or

N-((5*S*)-3-[3-Fluoro-4-[1-[(benzylamino)carbonyl]imino]-1-oxido-1,3-dihydro-2H-thiopyran-4-yl]phenyl]-2-oxo-1,3-oxazolidin-5-yl)methyl)acetamide, *Z*-isomer.

66. A method for treating microbial infections comprising: administering to a mammal in need thereof an effective amount of a compound of formula I as shown in claim 47.